

Notes for Special Needs Educators on Autistic Spectrum Disorder and Eating

At the Stephanie Alexander Kitchen Garden Foundation's Special Needs Networking Day in May 2012, the Foundation was delighted to host an 'in conversation' session with health practitioners Tracy Harb and Jillaine Wheeler, about students with autistic spectrum disorder (ASD) and their unique relationship to food. Below are some useful notes on the session.

- 🍅 Some schools hold tastings at assembly or have a harvest table on display: this promotes healthy role models for all students including those with ASD.
- 🍅 Eating something is actually the final step in a very complex process. We have NOT failed if the student fails to fully eat a food. Sometimes students have learned that food hurts. Eating is a learned behaviour and not something that all humans instinctively do (except in the first few weeks of life). Eating is complex, and there are something like 32 steps to eating (you will find a link to this article under 'Further Reading' below).
- 🍅 Eating is part of sensory integration – therefore it is often a challenge.
 - Try a 'Learning plate'. Visual acceptance is a good rung on the ladder to eating.
 - Peer pressure is powerful.
 - Touching the food goes a very long way towards trying the food.
- 🍅 Features of ASD students' digestion:
 - There is a strong relationship between the gut and the brain. 'Disbiosis' is when there is an imbalance of 'bad bugs' in the gut. They produce toxic by-products that influence the brain.
 - In ASD students, the absorption of nutrients is poor. Their nervous system is dependent on minerals they are not getting, and they are often undernourished.
 - ASD students typically have learned food addictions to white bread, milk and sugar, which give them false levels of energy, while the proteins are highly addictive and ultimately destructive. These foods promote the growth of yeast in the gut – alcohol is produced as a by-product.
- 🍅 Helpful foods:
 - probiotic foods, wholefoods, organically grown vegetables
 - fermented foods and foods containing beneficial bacteria are to be encouraged, such as sauerkraut and kimchi (a recipe for Sauerkraut can be found in Stephanie Alexander's *The Cook's Companion* (Penguin Lantern 2010); we will post recipes for this and kimchi on the Shared Table)
 - cabbage, daikon, radish, peppers and capsicum, carrots, apples, paw paw
 - a sample lunch might be tomato sauce with probiotic, gluten-free pasta and a fermented preserve such as kimchi.
- 🍅 Soil is alive! The organic garden care in the Kitchen Garden Program is wonderful for these students. Carry that care through with other food ingredients you use. Keep it simple.

Stories of change

A question was: what stories of change can you tell us? How did it happen?

- 🍅 Students can be tested for metals/analysis of bacteria. ASD students' nutritional profile is usually low in essentials like zinc and protein.
- 🍅 Start with a whole food, unprocessed food diet.

- Seasonality is very important.
- Promote seasonal awareness and purchasing tips to the school community.
- Use fresh and frozen vegetables – freezing preserves the nutrients well.
- Students can sprout edible seeds (quinoa, buckwheat etc.) and take home to share.
- Students can make flatbread and pizza bases from sprouted quinoa and buckwheat.
- 🍅 Boost their nutrient intake to help with sensory integration.
 - A gluten- and casein-free diet is not enough; ASD students need a wholefood diet.
 - Choose traditional, primary, good-quality and high-nutrient foods.
- 🍅 This diet has a settling approach on ASD children. Sleep, immune systems and nourishment all improve. The timeframe is quicker with younger ages, but can take two years for *optimum* change. As one of the speakers said, these students are like the canary in the coal mine, they are sensitive little canaries whose bodies react to all the noise from additives and processing in foods – keep it whole, and keep it clean, local and seasonal.
- 🍅 Your garden is a great resource!

Activity list: the things we use in our schools

- 🍅 Weather board – today's data, place by the front door
- 🍅 Memory matching board – on fuzzy felt with Velcro
- 🍅 Labels on garden beds (A5, C8 – 'Go get basil, it's in bed B6...')
- 🍅 Harvest guide – pictures and words of plants we often gather
- 🍅 Freecycle – search for this Yahoo Group in your area (<http://groups.yahoo.com>). A place to swap unwanted items – lots of garden material turn up here as building rubbish.
- 🍅 Step-by-step visual recipes (from the Foundation) – in the back of *Tools for Teachers* books and also soon on the Shared Table
- 🍅 Sensory symbols (eyes, nose, hands)
- 🍅 Photos of kids doing activity (chop, stir, whisk, fold, beat)
- 🍅 Matching symbols for ingredients (recipes & card sets – take the card and go look for the container with the matching card). Sparklebox has good icons.
- 🍅 You can print tea towels at www.spoonflower.com with photos or artwork you upload (choose cotton-linen canvas – you will need a volunteer to hem the edges).

Tracy Harb is a qualified Accredited Practising Dietician with a special interest in paediatric nutrition. Tracy has worked very closely with a range of professional colleagues over the years, including Occupational Therapists, Speech Therapists, and Nurses, to assist families with children with feeding difficulties, food aversion and sensory integration issues. She is currently undertaking a PhD in paediatric nutrition focussing on food allergies and intolerances in breastfed infants.

Jillaine Wheeler is a Nutritionist who operates a consultancy, *The Pantry Practitioner*. Jillaine's aim is to deliver a personalised and specific diet plan and/or foods that address diagnosed deficiencies, intolerances and pathology – to work in a cooperative manner with biomedical doctors to restore homeostasis or balance where deficiencies are part of the underlying cause. She seeks to find a dietary cause, effects and remedies for individuals with Autism Spectrum Disorder. Jillaine is part of the support team at W.I.N Health Coach Clinics – working closely with Biomedical Practitioner Dr Frank Golik, and has attended MINDD foundation seminars.

Further Reading for Special Needs Educators on Autistic Spectrum Disorder and Eating

Videos:

- What the Experts Have to Say, Kay A. Toomey: www.youtube.com/watch?v=CSD5dJ_6cbQ
- Food Matters (TV program): www.foodmatters.tv

Articles and reading:

- Toomey, Dr. Kay A., *Steps to Eating*. Discussed on this blog: <http://ecezero2three.com> and accessible as a PDF here: <http://childhealthanddevelopment.files.wordpress.com/2012/03/kaytoomey.pdf>
- Toomey, Dr. Kay A., *Top ten myths of mealtime in America*. Perfectly relevant to Australia (PDF): www.spdparentzone.org/resources/TOP%20TEN%20MYTHS%20OF%20MEALTIME%20IN%20AMERICA.pdf
- Toomey, Dr. Kay A., *When Children Won't Eat: Understanding the 'why's' and how to help* (PDF): www.spdparentzone.org/resources/When%20Children%20Wont%20Eat.pdf
- Twachtman-Reilly, Amarel & Zebrowski, *Addressing feeding disorders in children on the Autistic Spectrum in school-based settings: Physiological and behavioural issues*: <http://lshss.asha.org/cgi/reprint/39/2/261>
- Wheeler, Jillaine, *Nutritional Resources for ASD* – plus recipes and articles of interest: <http://pantrypractitioner.com.au/news.php>

Books and other resources:

- Australian Healthy Food Guide* (monthly magazine). A resource parents may be interested in: it's cost effective (\$4.95), includes a kids cooking section, covers food allergies and special diets and is easy to read: www.healthyfoodguide.com.au
- Queensland Government, *Healthy Jarjums make Healthy Food Choices*. Recommended by a school: www.health.qld.gov.au/healthieryou/healthyjarjums.asp
- VEA – *Safety in the Domestic Kitchen* – a useful resource Tracy Harb uses: www.vea.com.au/teachersNotes/SAFET2_V.pdf

Associations with further resources:

- ACNEM- Australasian College of Nutritional & Environmental Medicine: www.acnem.org/modules/mastop_publish/
- MINDD Foundation- Metabolic, Immunologic, Neurologic, Digestive, Developmental Educate families into biomedical and nutritional research: <http://mindd.org/s/archives.php/41-Frontpage.html>
- Mission Australia (and services): www.missionaustralia.com.au